

A Comparison of Fecal Coliform and E.coli Indicators

Handout 1, ~~draft 1~~ draft 2, 7/30 8/2- August 5

There is a total of 105 water bodies with enough E.coli data to assess for support of the contact recreation use. Of these 105 water bodies, there is a total of 180 assessment areas with enough E.coli data to assess for support. The following chart represents the general support outcome of this data

Water bodies with enough E.coli	Overall Support Fully Supporting	Overall Support Not Supporting	FS & NS AU's in the Water body
Water bodies	64	36	5
Assessment Units	120	60	n/a

A comparison was conducted on the E.coli and Fecal coliform assessment methods used to evaluate the support of the contact recreation use. The following chart represents the outcome of this comparison.

	Fecal GM - FS	Fecal GM - NS	Fecal SS- FS	Fecal SS - NS
Ecoli GM - FS	110 113	5	110 117	1
Ecoli GM - NS	10	37	15	31
Ecoli SS - FS	120 123	20 25	125 132	14 15
Ecoli SS - NS	-	17	-	17

GM = geo mean

FS = fully supporting

SS = single grab sample

NS = not supporting

Are there any assessment areas that would not be listed for contact recreation use because fecal coliform is fully supporting, but are now listed because the preferred indicator, E.coli, is not supporting? YES

The following assessment areas would not have been listed if only fecal coliform were considered (fecal coliform is fully supporting), but they are because E.coli is not supporting.

0202E (AU 02), 0203A (AU 01), 0229 (AU 02), 0506 (AU 04), 0604M (AU's 02 & 03)), 0604A (AU 01), 0610A (AU 01), 0612 (AU's 01 & 03)

Other assessment areas for 0604, 0610A, and 0612 are currently listed based on past assessments (carry overs) and do not have enough data to assess all of the previously impaired areas for bacteria.

Are there any assessment areas that would be listed for contact recreation use because fecal coliform is not supporting, but are not because the preferred indicator, E.coli, is fully supporting?

~~NO~~ YES

The following assessment areas would have been listed using fecal coliform. 0306 (AU 02), 0507B (AU 01), 0819 (AU 01), 0841 (AU 02), 1806A (AU 02), 1911 (AU 07)